

Lines & Angles

Answer Key

WORKSHEET-1

1. (d) 2. (c) 3. (d) 4. (a) 5. (c)
6. PQ, QR, RS, SP, PR, QS, PO, OR, SO, OQ (Ten line segments)
7. (a) 135° (b) 60°
8. (a) obtuse angle (b) right angle
9. $\angle 1 = \angle EGB$ $\angle 2 = \angle DHF$
 $\angle 3 = \angle GHC$ $\angle 4 = \angle AGH$
10. (a) $\overline{EA}, \overline{FC}, \overline{HD}, \overline{GB}$
(b) $\overline{EF}, \overline{GH}, \overline{EG}, \overline{FH}$
(c) $\overline{EF}, \overline{GH}$
11. $\overline{PQ}, \overline{QR}, \overline{RP}$ (3 lines)
12. Construct with protractor.
13. $\angle AOC, \angle COD, \angle DOB, \angle AOD, \angle COB, \angle AOB$ (6 angles)
14. Students will do themselves.
15. $\frac{360^\circ}{24} = 15^\circ$

A right angle is formed between 6 spokes.

So, largest acute angle between 5 spokes $= 5 \times 15^\circ = 75^\circ$

A straight angle is formed between 12 spokes, so largest obtuse angle between 11 spokes $= 11 \times 15^\circ = 165^\circ$

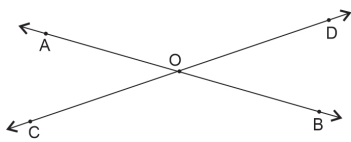
WORKSHEET-2

1. (b) 2. (c) 3. (d) 4. (b) 5. (c)
6. (a) vertex:- B, arms:- AB, BC
(b) vertex : - Q, arms:- PQ, QR
7. $(7.5)^\circ$
8. (a) Reflex angle (b) Acute angle (c) Obtuse angle (d) Reflex angle
9. Students will draw themselves.





10. $\angle AOD, \angle DOB, \angle BOC, \angle COA$



11. (a) $\angle 3 = \angle ABC$, vertex B (b) $\angle ACB$ (c) $\angle DCA$ (d) AC

12. (a) $\angle ABL, \angle ACL, \angle BAL, \angle LAC, \angle ALB, \angle ALC, \angle BLC$ (7 angles)

(b) $\overline{AB}, \overline{AC}, \overline{BL}, \overline{LC}, \overline{BC}, \overline{AL}$ (6 segments)

13. (a) AC, AB, AD (b) AC, BD, SQ, PR (c) BC, AB, DB,
Collinear points $\rightarrow (A, P, B) (A, S, D) (A, O, C) (B, O, D) (B, Q, C) (C, R, D)$

14. $\angle 1 = \angle DAE$ or $\angle EAD$

$\angle 2 = \angle BAD$ or $\angle DAB$

$\angle 3 = \angle BCD$ or $\angle DCB$

$\angle 4 = \angle ADE$ or $\angle EDA$

$\angle 5 = \angle AFE$ or $\angle EFA$

15. (a) Acute angle

(b) Obtuse angle

(c) Acute angle

(d) Obtuse angle

(e) Acute angle

Case Study Based Questions

1. (i) d (ii) a (iii) c (iv) b

2. (i) d (ii) a (iii) c (iv) d

Assertion & Reason

1. A

2. D

3. A